



Amplify Science
New York City

**Guided Planning and
Support Session
Grade 7 Phase Change**

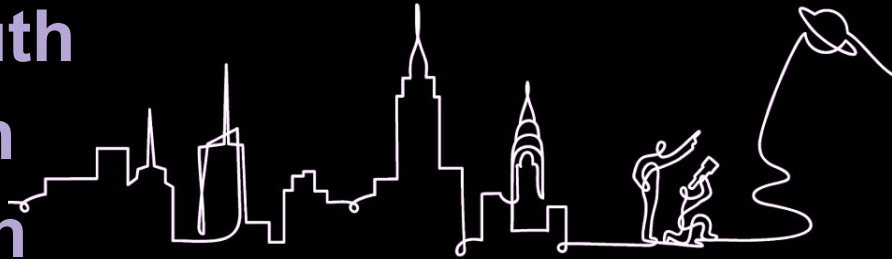
Who's in the Room?

Represent your Borough!



Share your name, role, borough.

- 1- Brooklyn North
- 2- Brooklyn South
- 3- Queens North
- 4- Queens South
- 5- The Bronx
- 6- Staten Island



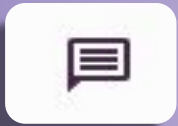
Workshop Norms



- Please keep your camera on, if possible.
- Take some time to orient yourself to the platform



- Mute your microphone to reduce background noise unless sharing with the group



- The chat box is available for posting questions or responses to during the training



- Make sure you have a note-catcher present



- Be an active participant - chat, ask questions, discuss, share!

Workshop Goals

- Explore and begin internalizing the the Populations and Resources Unit
- Build your facility with the digital features and student supports of the unit
- Develop a plan for implementing the core unit within your class schedule and instructional format



During this Session

We will visit and explore:

1. [**The Amplify Science NYC Resources site**](#)
2. [**The Amplify Science Digital Teacher's Guide**](#)
3. [**The Amplify Science NYC Program Guide**](#)
4. [**The Amplify Science Program Hub**](#)



Plan for the day

- **Amplify Science NYC**
- Guided Unit Planning
- Guided Lesson Planning
- Additional Resources
- Reflection and closing





Questions
Reflections
Connections

Planning Notes

Note Taking Opportunities

A version of this presentation will be available to you.

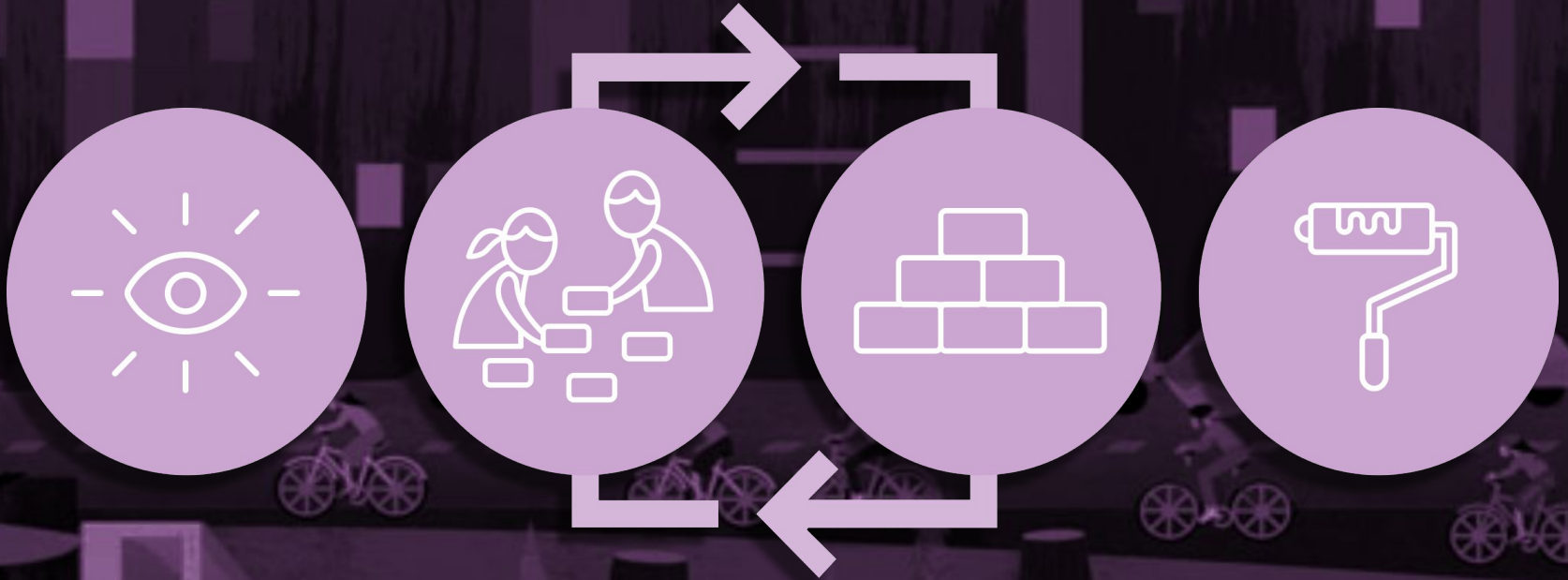
However, you may want to record some of the presenter's comments and suggestions from your colleagues!

Reflect and Share

When you begin planning for an Amplify Science Unit, which resources do you use first and most often?



Revisiting The Amplify Science approach

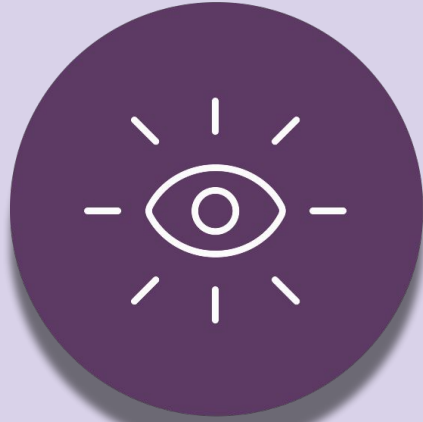


Problem-based deep dives

Students inhabit the role of scientists and engineers to explain or predict phenomena. They use what they figure out to solve real-world problems.



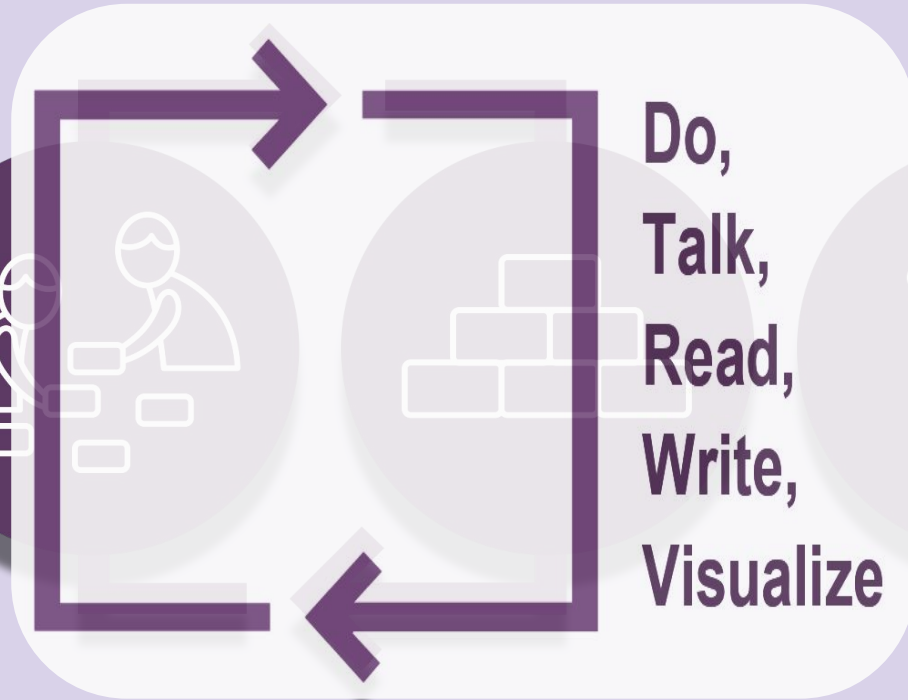
The approach



**Introduce a
phenomenon/real
world problem**



**Collect evidence
from
multiple sources**



**Build
increasingly
complex
explanations**



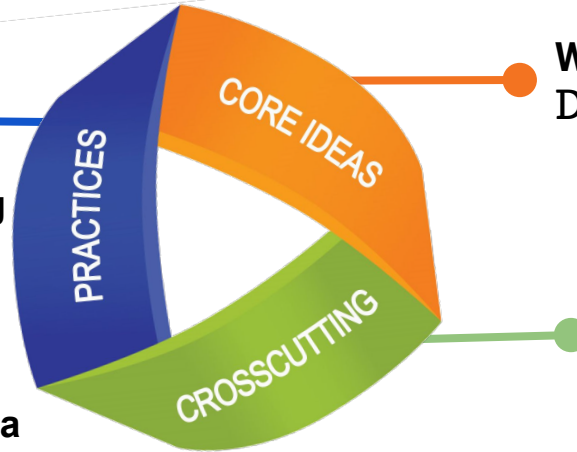
**Apply knowledge to
solve a different
problem**

NGSS/NYSSLS 3D



What scientists do Science and Engineering Practices

1. Asking questions and defining problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations and designing solutions
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information



What scientists want to know Disciplinary Core Ideas

How scientists make sense of, organize and connect...

Crosscutting Concepts

- patterns
- cause and effect
- scale, proportion, and quantity
- systems and system models
- energy and matter
- structure and function
- stability and change

Amplify Science
I'm a chemist.



Amplify Science
I'm a civil engineer.



Amplify Science
We are biologists.



Amplify Science offers students the opportunity to engage in Problem-based deep dives that empower them to inhabit the role of scientists and engineers to explain or predict phenomena. They use what they figure out to solve real-world problems.

Amplify Science
I'm a climatologist.










Amplify Science
I'm a genetic researcher.



Amplify Science
I'm a spectroscopist.



Amplify Science NYC 21-22 Three types of Units

Sept.			Oct.			Nov.			Dec.			Jan.			Feb.		Mar.			Apr.		May			Jun.													
9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1	11/8	11/15	11/22	11/29	12/6	12/13	12/20	1/3	1/10	1/17	1/24	1/31	2/7	2/14	2/28	3/7	3/14	3/21	3/28	4/5	4/11	4/25	5/2	5/9	5/16	5/23	5/30	6/6	6/13	6/20	6/27
																																						
Launch Unit: Harnessing Human Energy			Thermal Energy			Populations and Resources			Matter and Energy in Ecosystems			Weather Patterns			Ocean, Atmosphere, and Climate			Earth's Changing Climate																				
																																						
Launch Unit: Microbiome			Metabolism			Phase Change			Chemical Reactions			Plate Motion			Engineering Internship: Plate Motion		Rock Transformations			Engineering Internship: Earth's Changing Climate																		
																																						
Launch Unit: Geology on Mars			Earth, Moon, and Sun			Force and Motion			Engineering Internship: Force and Motion			Magnetic Fields			Light Waves			Traits and Reproduction			Natural Selection			Evolutionary History														

Launch units

11 Lessons
Opportunities for students to extend their scientific thinking and practices outside the traditional realms of the science classroom.

Launch Units

Introduces practices

Scientific Argumentation

- Active Reading

- Writing

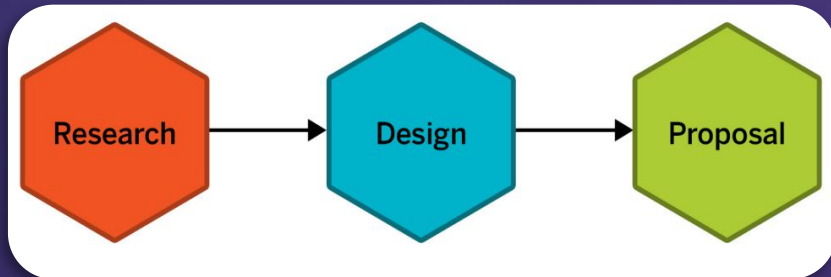
- Talking about science ideas

- Using Amplify Science Tools

Engineering Internship Units

10 lessons each

- Students take on the role of interns for the fictional Futura company
- Designing solutions for urgent real-world problems
- Apply and deepen learning from Core Units while cultivating students' responsibility to help others
- Teacher communicates through Futura Workspace



Core Units

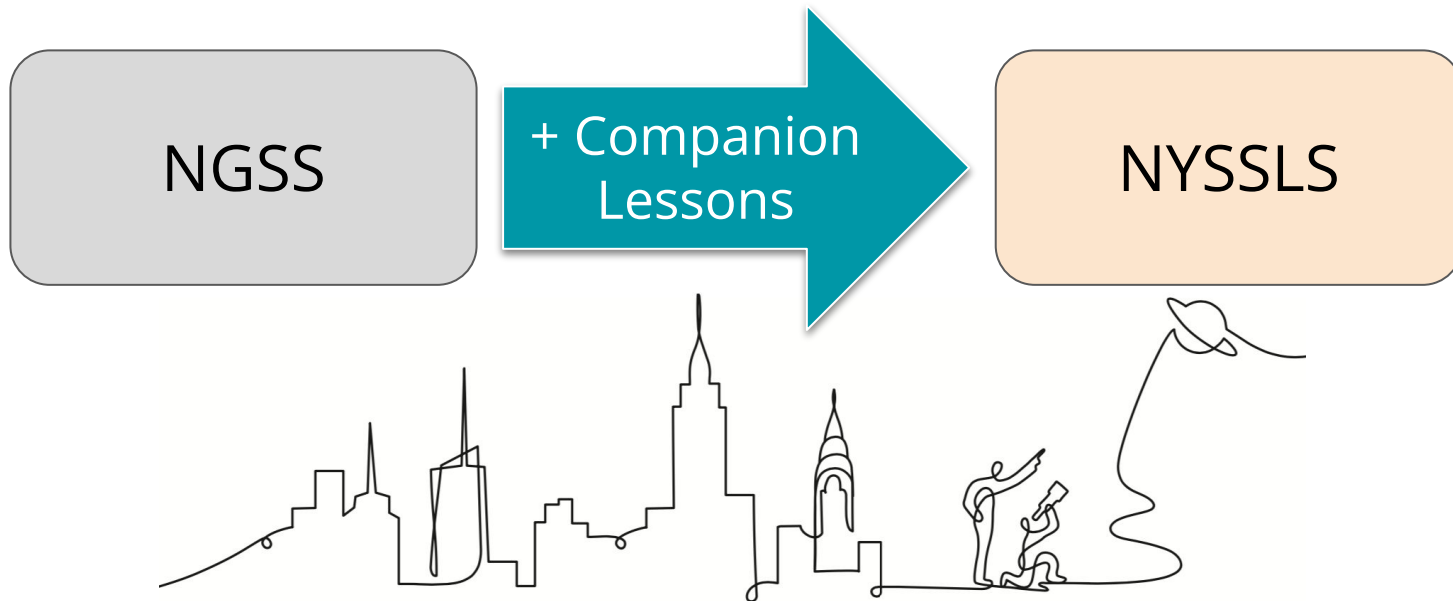
19 lessons

- Students work to figure out the unit's anchoring phenomena.
- Students gain an understanding of the unit's DCI's utilizing SEP's and CCC's.
- Unit culminates with a Science Seminar: Students apply their learning from the unit to a new real-world problem

Partnership: Amplify-LHS-NYC DOE

Amplify Science

Amplify Science NYC Edition



A stylized illustration of a bear's face, rendered in a dark purple color. The bear is wearing black-rimmed glasses. The background is a solid, slightly lighter shade of purple. The word "Questions?" is written in a white, bold, sans-serif font across the bottom of the bear's face.

Questions?

Amplify Science Chat Race

Type the letter for your answer to the questions you see here in chat!

A

Type letter A in
Chat

C

Type letter C in
Chat

B

Type letter B in
Chat

D

Type letter D in
Chat

What are the multiple modalities?

A

Do, talk, read,
write, visualize

C

Do, visualize,
hands-on
projects

B

Read, write,
google search

D

Reading, writing,
math

Where can you find login information and NYC scope and sequence?

A

On the NYC
Resource Site

C

In the offline
preparation
guide

B

The Program
Hub

D

The TG on the
Unit Level

Where can you find the mandatory NYC companion lessons?

A

On the NYC
Resource Site

C

In the offline
preparation
guide

B

The Program
Hub

D

The TG on the
Unit Level

New York City Resources site

Amplify Science
Resources for NYC (6-8)



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

—
Welcome! This site contains supporting resources designed for the New York City Department of Education Amplify Science adoption for grades 6–8.

**No Login Required:
Bookmark this website!**



Amplify.

A stylized illustration of a bear's face, rendered in a dark purple color. The bear is wearing black-rimmed glasses. The background is a solid, slightly lighter shade of purple. The word "Questions?" is written in a white, bold, sans-serif font across the bottom of the bear's face.

Questions?

Plan for the day

- Amplify Science NYC
- **Guided Unit Planning**
- Guided Lesson Planning
- Additional Resources
- Reflection and closing



What is phenomenon-based instruction?

A scientific **phenomenon** is an **observable event** that occurs in the universe that we can use science ideas to explain or predict.

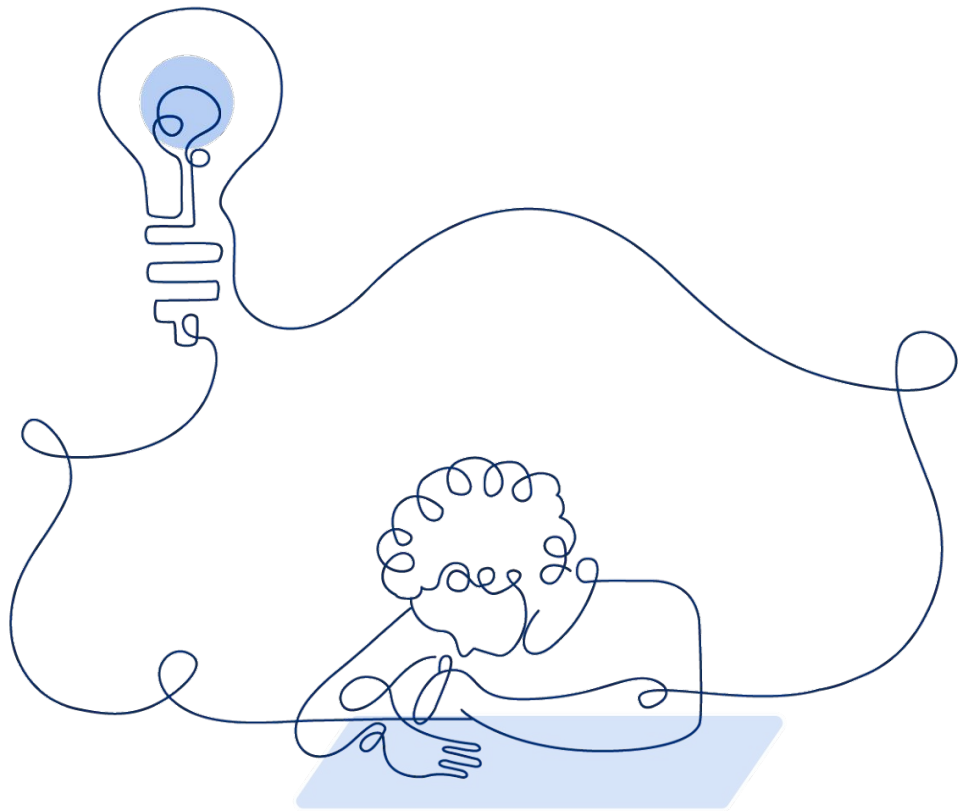


Previewing the unit

Introducing the phenomenon

Amplify Science units are designed around complex phenomena that drive student learning through the unit.

Pay attention to the phenomenon, or observable event, students will figure out in your unit.



Phase Change

The image illustrates the phase change of a solid to a liquid using three popsicles. The first popsicle on the left is a solid orange color. The middle popsicle is partially melted, with a thick, orange liquid coating the wooden stick. The third popsicle on the right is almost entirely melted, with a large, flowing puddle of orange liquid surrounding the stick. The background is a dark, muted blue.

I'm a Chemist!

Taking on the role of student chemists working for the fictional Universal Space Agency (USA), students investigate the mystery of a disappearing methane lake on Titan (see unit map).

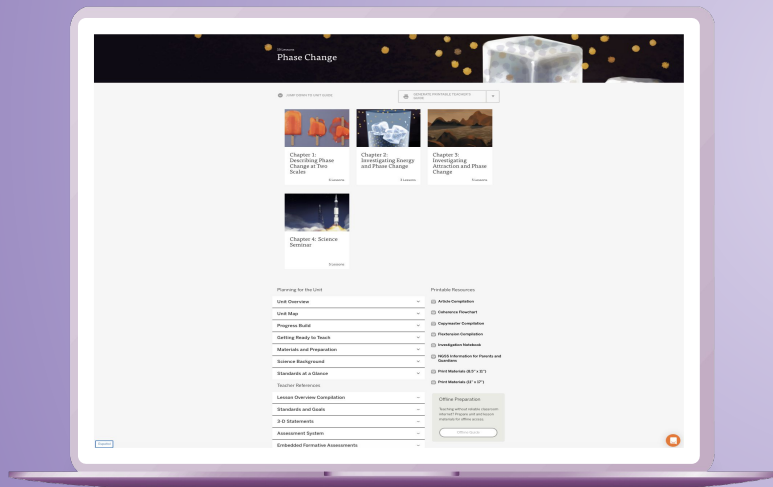
Phase Change



**Anchor
Phenomenon:
Images taken
by a space
probe show
that a methane
lake on Titan
disappeared.**



Digital Teacher's Guide

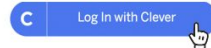


Login to Your Digital Teacher's Guide

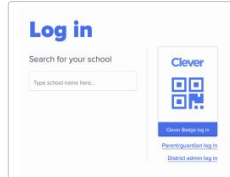
1. Go to learning.amplify.com
 - Reminders:
 - Use the latest version of Safari or Chrome
 - Supported devices: iPad 5 or more recent, MacBooks, Windows laptops or desktops, and Chromebooks
 - **Pro Tip:** Bookmark this url in your browser



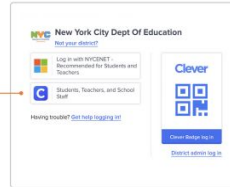
2. Select **Log In with Clever**



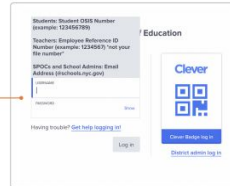
3. Search for and **select your school by name or DBN** (ex. 00M000 - PS/IS School Name)



4. Select **Students, Teachers, and School Staff**



5. Enter your district **Employee ID number** in both **username and password** fields



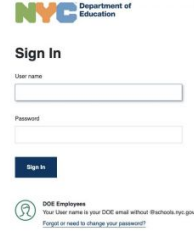
6. Click **Log In**

Clever

TeachHub: Teacher Login Guide



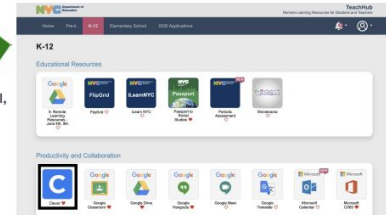
1. Head to the DOE's new Remote Learning portal at teachhub.schools.nyc.gov



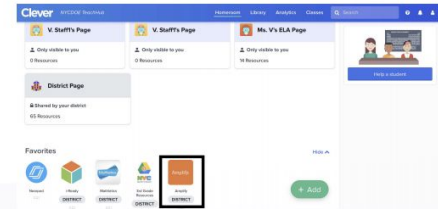
2. Enter your DOE username and password

**For teachers, this is your DOE email address with the @school.nyc.gov removed.*

3. Select the **K12** tab at the top of your portal, then click on the Clever app



4. Click on the Amplify icon



Clever

Questions? Visit support.clever.com.

Guided Navigation Unit Level

The screenshot shows a digital unit guide for 'Phase Change' on a laptop screen. The interface is clean and organized, featuring a dark header with the unit title and a decorative background of glowing particles and a 3D ice cube. Below the header, there are navigation options like 'JUMP DOWN TO UNIT GUIDE' and 'GENERATE PRINTABLE TEACHER'S GUIDE'. The main content area displays four chapter cards: Chapter 1 (Describing Phase Change at Two Scales, 8 Lessons), Chapter 2 (Investigating Energy and Phase Change, 3 Lessons), Chapter 3 (Investigating Attraction and Phase Change, 5 Lessons), and Chapter 4 (Science Seminar, 1 Lesson). On the right side, there are two columns of resources: 'Planning for the Unit' and 'Printable Resources'. The 'Planning for the Unit' column includes dropdown menus for Unit Overview, Unit Map, Progress Build, Getting Ready to Teach, Materials and Preparation, Science Background, Standards at a Glance, Teacher References, Lesson Overview Compilation, Standards and Goals, 3-D Statements, Assessment System, and Embedded Formative Assessments. The 'Printable Resources' column includes Article Completion, Coherence Flowchart, Copymaster Completion, Flashcard Completion, Investigation Notebook, NSES Information for Parents and Guardians, and Print Materials (8.5" x 11") and (11" x 17"). At the bottom right, there is an 'Offline Preparation' section with a note about teaching without internet access and a 'Offline Guide' button. A small 'Home' button is located at the bottom left of the page.

19 Lessons
Phase Change

JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE

Chapter 1: Describing Phase Change at Two Scales
8 Lessons

Chapter 2: Investigating Energy and Phase Change
3 Lessons

Chapter 3: Investigating Attraction and Phase Change
5 Lessons

Chapter 4: Science Seminar
1 Lesson

Planning for the Unit

- Unit Overview
- Unit Map
- Progress Build
- Getting Ready to Teach
- Materials and Preparation
- Science Background
- Standards at a Glance
- Teacher References
- Lesson Overview Compilation
- Standards and Goals
- 3-D Statements
- Assessment System
- Embedded Formative Assessments

Printable Resources

- Article Completion
- Coherence Flowchart
- Copymaster Completion
- Flashcard Completion
- Investigation Notebook
- NSES Information for Parents and Guardians
- Print Materials (8.5" x 11")
- Print Materials (11" x 17")

Offline Preparation

Teaching without stable classroom internet? Prepare unit and lesson materials for offline access.

Offline Guide

Home

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title:

What is the phenomenon students are investigating in your unit?

Unit Question:

Student role:

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Guided Unit Internalization Document

What is the student role? What will students figure out in Chapter 1?

Guided Unit Internalization
Part 1: Unit-level Internalization

Unit title: _____

What is the phenomenon students are investigating in your unit?

Unit Questions: _____ Student role: _____

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Planning for the Unit

Unit Overview



Unit Map



Progress Build



Getting Ready to Teach



Materials and Preparation



Science Background



Standards at a Glance



Teacher References

Lesson Overview Compilation



Printable Resources



Article Compilation



Coherence Flowchart



Copymaster Compilation



Flexextension Compilation



Investigation Notebook



NGSS Information for Parents and Guardians



Print Materials (8.5" x 11")



Print Materials (11" x 17")

Offline Preparation

What are the Unit and Chapter Questions?

Guided Unit Internalization
Part 1: Unit-level Internalization

Unit title: _____

What is the phenomenon students are investigating in your unit?

Unit Question: _____ Student role: _____

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Planning for the Unit

Unit Overview



Unit Map



Progress Build



Getting Ready to Teach



Materials and Preparation



Science Background



Standards at a Glance



Teacher References

Lesson Overview Compilation



Printable Resources



Article Compilation



Coherence Flowchart



Copymaster Compilation



Flexextension Compilation



Investigation Notebook



NGSS Information for Parents and Guardians



Print Materials (8.5" x 11")



Print Materials (11" x 17")

Offline Preparation

By the end of the unit what will the students figure out?

Guided Unit Internalization
Part 1: Unit-level internalization

Unit title:









What is the phenomenon students are investigating in your unit?

Unit Question: Student role:

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Planning for the Unit	
Unit Overview	▼
Unit Map	▼
Progress Build	▼
Getting Ready to Teach	▼
Materials and Preparation	▼
Science Background	▼
Standards at a Glance	▼
Teacher References	
Lesson Overview Compilation	▼

Printable Resources
 Article Compilation
 Coherence Flowchart
 Copymaster Compilation
 Flexextension Compilation
 Investigation Notebook
 NGSS Information for Parents and Guardians
 Print Materials (8.5" x 11")
 Print Materials (11" x 17")
Offline Preparation

What science concepts do students need to figure out in order to build an explanation of the unit phenomena?

Guided Unit Internalization
Part 1: Unit-level Internalization









Unit title: _____

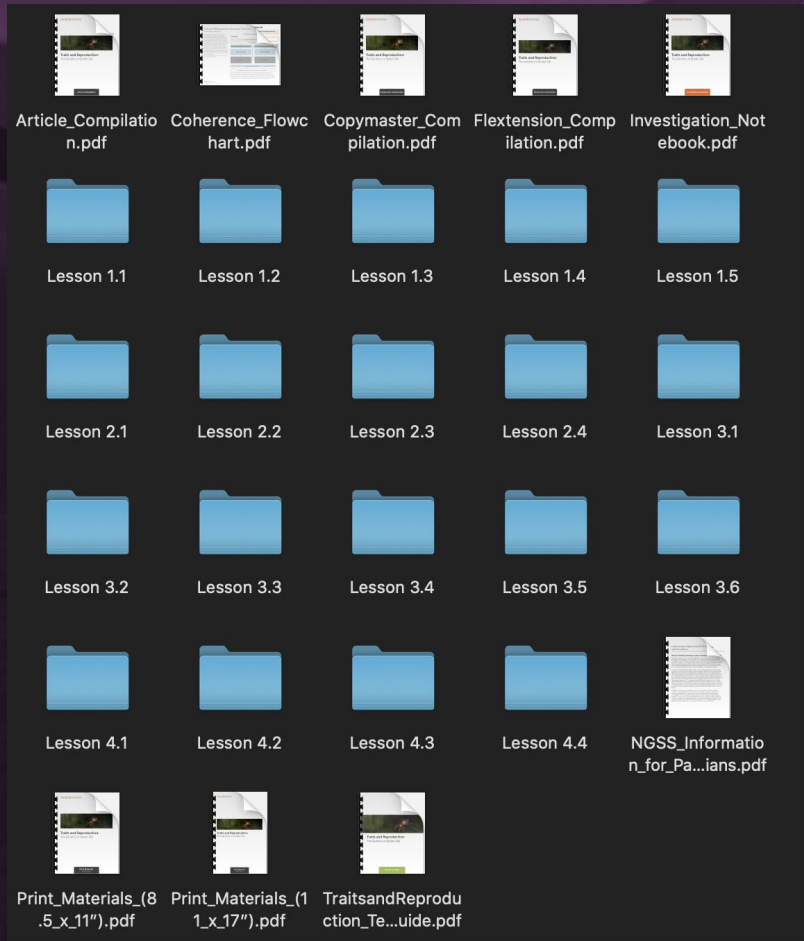
What is the phenomenon students are investigating in your unit?

Unit Question: _____ Student role: _____

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Planning for the Unit		Printable Resources
Unit Overview	▼	 Article Compilation
Unit Map	▼	 Coherence Flowchart
Progress Build	▼	 Copymaster Compilation
Getting Ready to Teach	▼	 Flexextension Compilation
Materials and Preparation	▼	 Investigation Notebook
Science Background	▼	 NGSS Information for Parents and Guardians
Standards at a Glance	▼	 Print Materials (8.5" x 11")
Teacher References		 Print Materials (11" x 17")
Lesson Overview Compilation	▼	Offline Preparation



Planning Tip!
Remember to
Download the
Offline Guide
Materials

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title:

What is the phenomenon students are investigating in your unit?

Unit Overview

Unit Question:

Lesson Overview Compilation

Student role:

Unit Overview

By the end of the unit, students figure out ...

**Unit Map, See also
Progress Build**

What science ideas do students need to figure out in order to explain the phenomenon?

**Unit Map, Progress Build,
Science Background Document**

**Where to
Look!**









Reflect-Type-Chat! Share and Learn

**In two sentences or less,
what do students figure
out by the end of the
unit?**

A stylized illustration of a bear's face, rendered in a dark purple color. The bear is wearing black-rimmed glasses. The background is a solid, slightly lighter shade of purple. The word "Questions?" is written in a white, bold, sans-serif font across the bottom of the bear's face.

Questions?

Planning Document Where is the Coherence Flowchart?

Planning for the Unit	Printable Resources
Unit Overview	 Article Compilation
Unit Map	 Coherence Flowchart
Progress Build	 Copymaster Compilation
Getting Ready to Teach	 Flexextension Compilation
Materials and Preparation	 Investigation Notebook
Science Background	 NGSS Information for Parents and Guardians
Standards at a Glance	 Print Materials (8.5" x 11")
Teacher References	 Print Materials (11" x 17")
Lesson Overview Compilation	Offline Preparation

Phase Change: Titan's Disappearing Lakes

Problem students work to solve

Chapter 1 Question

Investigation Questions

Evidence sources and reflection opportunities

Key concepts

Application of key concepts to problem

Explanation that students can make to answer the Chapter 1 Question

Why did the methane lake on Titan disappear?

What happened to the liquid in Titan's lake?

How does the appearance of a substance change when it changes phase? (1.2)

- Observe phase change videos (1.2)
- Discuss the properties of substances in different phases using unit vocabulary (1.2)

- A solid holds its shape and does not take the shape of its container. (1.2)
- A gas has no visible shape and fills its container. (1.2)
- A liquid flows and can take the shape of its container. (1.2)

- Use the Modeling Tool to show what would happen if the lake on Titan froze or evaporated and write a short explanation to support each model (1.6)

The methane lake on Titan began as a liquid. The liquid methane could flow because the molecules can move around one another, but not apart from one another. If the lake froze, the liquid methane would become a solid. Solid methane would keep its shape because the molecules in a solid can only move in place, but they cannot move around one another or apart. If the lake evaporated, the liquid methane would have become a gas. Methane gas would not have a visible shape because gas molecules can move away from one another.

What happens to the molecules of a substance when it changes phase? (1.3-1.6)

- Observe evaporation and condensation and draw predictions of what a solid, liquid, and gas looks like at the molecular scale (1.3)
- Use the Sim to investigate phase changes at the molecular scale (1.3)
- Read an article from *Weird Water Events* (1.4)
- Revisit an excerpt from *Weird Water Events* (1.5)
- Use the Modeling Tool to show what happens to an ice pop when it melts (1.5)

- A solid keeps its shape because its molecules only move in place, not around each other. (1.5)
- A liquid can flow because its molecules move around, not away from each other. (1.5)
- A gas does not have a visible shape because gas molecules can move away from each other. (1.5)
- A phase change is when the molecules that make up a substance experience a change to their freedom of movement. This phase change involves a macro-scale change in appearance. (1.5)

Skim the Chapter 1 Coherence Flowchart.

Think about how you might use the Coherence Flowchart to summarize learning throughout Chapter 1.

Amplify.

Planning for Digital Apps

Read the Apps in your Unit Section of the Teacher References



Teacher References

Lesson Overview Compilation



Standards and Goals



3-D Statements



Assessment System



Articles in This Unit



Apps in This Unit



Press on a molecule to **track it**. You can also track **two molecules** at once.



Using the print version? Watch the video at tinyurl.com/AMPPC-15

Planning for the Assessment System



Progress Build

The unit's Progress Build describes the way students' explanatory understanding of the unit's focal phenomena is likely to develop and deepen over the course of a unit. It is an important tool in understanding the structure of a unit and in supporting students' learning: it organizes the sequence of instruction (generally, each level of the Progress Build corresponds to a chapter), defines the focus of assessments, and grounds the inferences about student learning progress that guide suggested instructional adjustments and differentiation.

Teacher References

Lesson Overview Compilation



Standards and Goals



3-D Statements



Assessment System



Embedded Formative Assessments



Books in This Unit



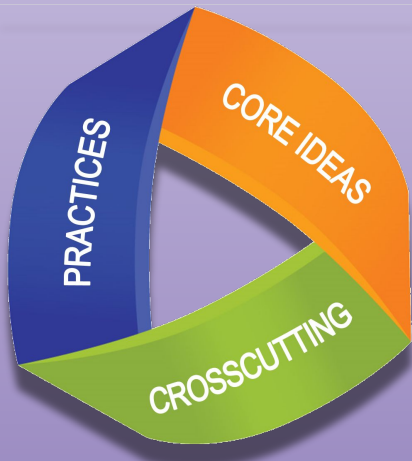
Apps in This Unit



Flexextensions in This Unit



3-D Assessment Connections



Teacher References	
Lesson Overview Compilation	▼
Standards and Goals	▼
3-D Statements	▼
Assessment System	▼
Embedded Formative Assessments	▼
Articles in This Unit	
Apps in This Unit	
Flextensions in This Unit	

Lesson 4.2, Activity 3:
Student-to-Student
Discussion: Discussing
Evidence and Claims

Assessment Type:
On-the-Fly Assessment

Evaluation Guidance:

- Look for/Now What?
notes

DCI:

- LS4.A: Evidence of Common Ancestry and Diversity

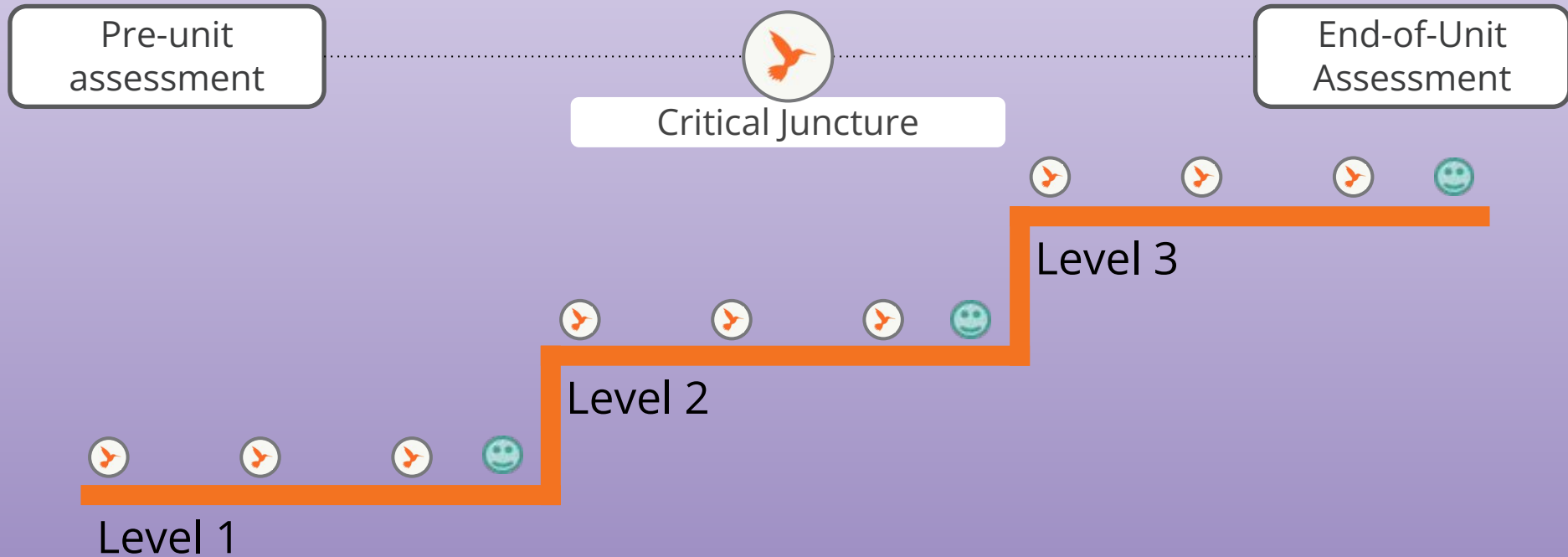
SEPs:

- Practice 4: Analyzing and Interpreting Data
- Practice 7: Engaging in Argument from Evidence
- Practice 8: Obtaining, Evaluating, and Communicating Information

CCC:

- Stability and Change

6-5 Assessment System



G7 Phase Change

1.1

Pre-unit
assessment



Critical Junctures

End-of-Unit
Assessment



Level 1:
When a substance changes phase, the freedom of movement of its molecules has changed.



Level 2:
Energy transfers cause phase changes.



Level 3:
Molecular attraction affects the amount of energy transfer required for a phase change.

Benchmark Assessments

- Grades 3-8
- 4 Benchmarks per grade
- 14-15 items perform

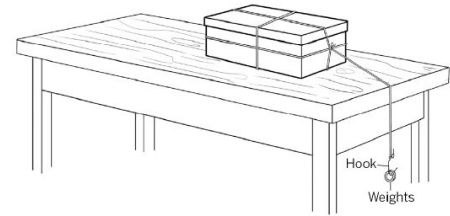
Click to open
Benchmark
Assessment site



Benchmark
Assessments

1

This box is sitting still on a table. You want to understand the changing forces that act on the box. Which of the following investigations would help you do this?



- Describe the direction the box is pushing on the table.
- Observe that the box is not moving. That means there are no forces acting on it.
- Hang weights from the hook. The weights will push on the box.
- Hang weights from the hook. The weights will pull on the box. The box will slide to the end of the table.

2

Vincent wants to move an object using touching forces. Which test will show that touching forces move objects?

- He could drop a feather from several different heights and see how fast it falls.
- He could pull a toy car with a string until it hits another toy car.
- He could rub a balloon on his shirt and hold it over his head to make his hair stand up.
- He could use a magnet to pull a stack of paper clips from one end of the table to another.

Plan for the day

- Amplify Science NYC
- Guided Unit Planning
- **Guided Lesson Planning**
- Additional Resources
- Reflection and closing

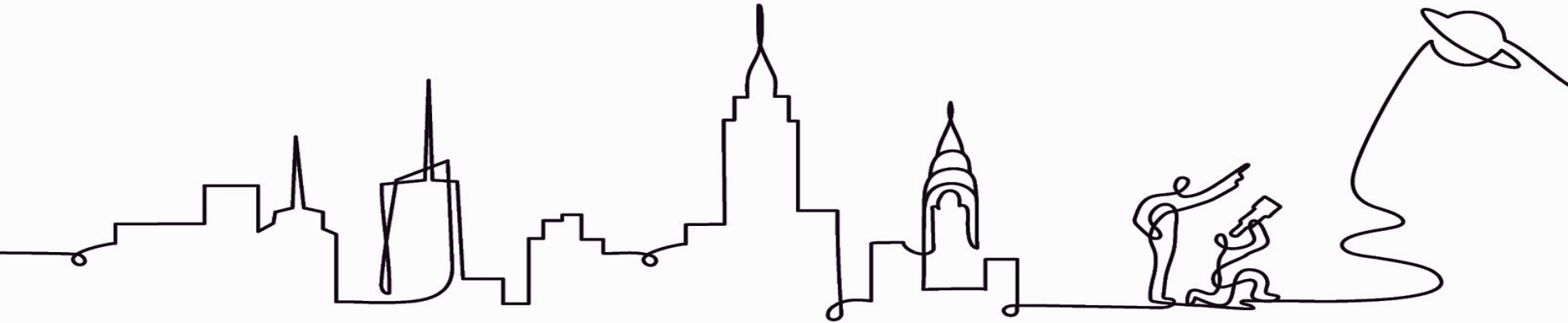


Guided Lesson Exploration and Planning



Differentiation

Quick Review of Lesson Level Brief



Lesson Exploration

Use the Lesson Brief for:

1. information about lesson timing
2. materials and preparation
3. differentiation suggestions
4. Digital Resources

The screenshot shows a digital lesson interface. At the top, there's a header with the title "Lesson 1.2: Introducing Titan's Disappearing Lake" overlaid on an image of four orange popsicles that are melting from left to right. Below the header is a navigation bar with four sections: "Lesson Brief Activities", "1 WARM-UP Warm-Up", "TEACHER Investigating Methane on Titan", and "TEACHER Introducing Phase and Phase Change", followed by a "2 STUDENT-TO-STUDENT DISCUSSION Discussing Difference in Appearance". Below the navigation bar are buttons for "RESET LESSON", "GENERATE PRINTABLE LESSON GUIDE", and "@ ASSIGN". The main content area is divided into three columns: "Overview" (with sub-sections: Materials & Preparation, Differentiation, Standards, Vocabulary, Unplugged?), "Overview" (with a paragraph of text), and "Digital Resources" (with a list of resources: Classroom Slides 1.2 | PowerPoint, Classroom Slides 1.2 | Google Slides, All Projections, Classroom Videos 1.2 | Zip). A small "pañol" label is visible in the bottom left corner.

Lesson 1.2:
Introducing Titan's
Disappearing Lake

Lesson Brief Activities < 1 WARM-UP Warm-Up T TEACHER Investigating Methane on Titan T TEACHER Introducing Phase and Phase Change 2 STUDENT-TO-STUDENT DISCUSSION Discussing Difference in Appearance

RESET LESSON GENERATE PRINTABLE LESSON GUIDE @ ASSIGN

Overview
Materials & Preparation
Differentiation
Standards
Vocabulary
Unplugged?

Overview
Students are introduced to their role as student chemists, enlisted to solve the mystery of the disappearing lake on Saturn's moon, Titan. They learn that scientists think the lake disappeared through either evaporation or freezing. As an introduction to phase change, students discuss video clips of examples of everyday phase changes on Earth. They use their background knowledge and video observations to describe the macroscale appearance of solids, liquids, and gases and the changes between these three phases. Students end the lesson by

Digital Resources
Classroom Slides 1.2 | PowerPoint
Classroom Slides 1.2 | Google Slides
All Projections
Classroom Videos 1.2 | Zip

pañol

Science Seminar



Considering claims and evidence



Participating in the Science Seminar



Writing an argument



Science Seminar
Anchor Phenomenon:
A liquid oxygen
machine is
malfunctioning.

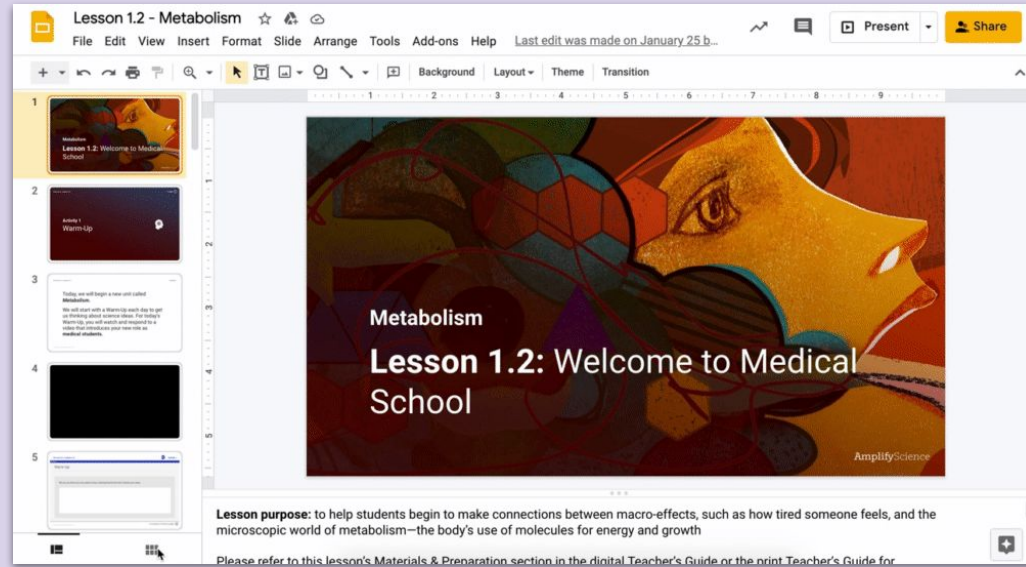


Using Classroom Slides as a planning tool

Focus: Science Seminar

Teacher tip: Classroom Slides are a great visual summary of a lesson. Many teachers download and flip through a lesson's Classroom Slides deck to preview what happens in the lesson.

Download and use the slides to review the science seminar lessons in your unit. Record your planning observations/notes!



The screenshot shows a digital presentation interface for 'Lesson 1.2 - Metabolism'. The title bar includes the lesson name, a star icon, and a share icon. Below the title bar is a menu with options: File, Edit, View, Insert, Format, Slide, Arrange, Tools, Add-ons, and Help. A status bar indicates 'Last edit was made on January 25 b...'. The main interface features a toolbar with icons for navigation and editing, and a slide navigation pane on the left showing five slides. The current slide, slide 1, is titled 'Metabolism Lesson 1.2: Welcome to Medical School' and features a stylized illustration of a person's face with a molecular structure overlay. The text on the slide reads 'Metabolism Lesson 1.2: Welcome to Medical School' and 'AmplifyScience'. Below the slide, there is a 'Lesson purpose' section: 'Lesson purpose: to help students begin to make connections between macro-effects, such as how tired someone feels, and the microscopic world of metabolism—the body's use of molecules for energy and growth'. At the bottom, there is a note: 'Please refer to this lesson's Materials & Preparation section in the digital Teacher's Guide or the print Teacher's Guide for...'. The interface also includes 'Present' and 'Share' buttons in the top right corner.

A stylized illustration of a bear's face, rendered in a dark purple color. The bear is wearing black-rimmed glasses. The background is a solid, slightly lighter shade of purple. The word "Questions?" is written in a white, bold, sans-serif font across the bottom of the bear's face.

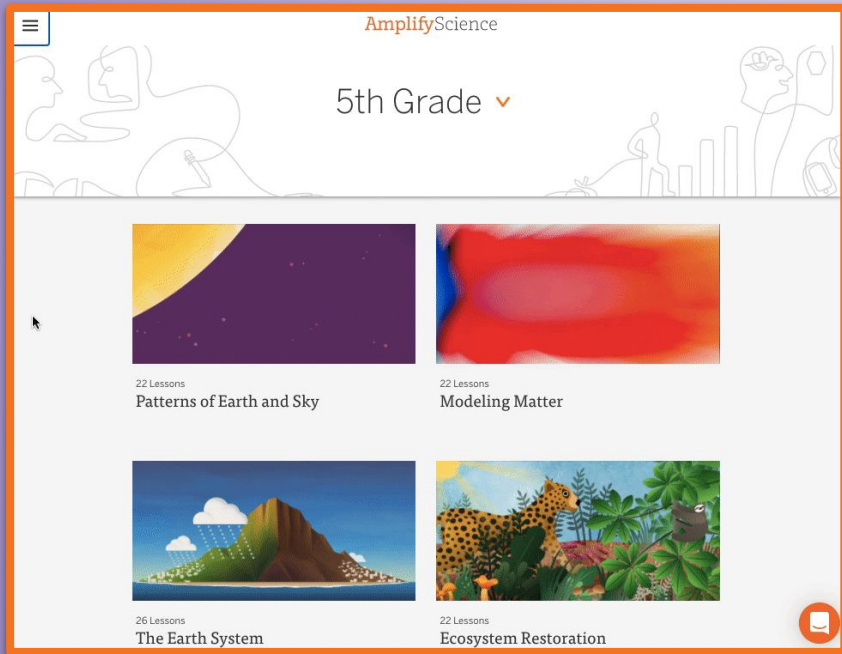
Questions?

Plan for the day

- Amplify Science NYC
- Guided Unit Planning
- Guided Lesson Planning
- **Additional Resources**
- Reflection and closing



The Program Hub with supplemental and self study resources



The screenshot shows the AmplifyScience website interface for 5th Grade. At the top, the logo "AmplifyScience" is on the left, and "5th Grade" with a dropdown arrow is in the center. The background features faint line art of people and a bar chart. Below the header, there are four course cards arranged in a 2x2 grid:

- Patterns of Earth and Sky:** 22 Lessons. The card features a yellow sun and a dark purple sky with stars.
- Modeling Matter:** 22 Lessons. The card features a red and orange gradient background.
- The Earth System:** 26 Lessons. The card features a landscape with a mountain, a river, and a city.
- Ecosystem Restoration:** 22 Lessons. The card features a colorful illustration of a leopard in a jungle.

A small red icon is visible in the bottom right corner of the interface.



Reflect-Type-Chat! Share and Learn

Which self-study resource on the Program-Hub will you use most often and why?

The Amplify Science Program Guide



AmplifyScience

New York City

Welcome

Program developers

Designed for the NGSS

Program components

Scope and Sequence

Phenomena, standards, and progressions

Assessments

Science and literacy

Access and equity

Resources

Welcome

The Program Guide details information about the program, including its authorship, development, themes, and more. It serves as a resource for finding out more about the program's structure, components, supports, how it meets standards, and flexibility.

Navigate through the links on the left-hand side of the page to access more information about the program and to explore resources that can help with your implementation.

**No Login Required:
Bookmark this
website!**

ACCESS THE DIGITAL
CURRICULUM

Resources

Support and FAQs

Technical Support

(800) 823-1969

scihelp@amplify.com

More Amplify Science

Transitional Kindergarten (TK)

Search Site ...



Access and Equity: Amplify Science Program Guide

AmplifyScience

Amplify Science

Welcome

Program developers

Designed for the NGSS

Program components

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ACCESS THE DIGITAL
CURRICULUM

Support

[Amplify Help Center](#)

[1-800-823-1969](tel:1-800-823-1969)

scihelp@amplify.com

More Amplify Science

[Transitional Kindergarten](#)

Search Site ...



Record your findings!

Classwork Help

Introduction to Classwork

Amplify Science, grades 6-8

Amplify.

September 2020



New! Assign in Amplify

AmplifyScience > Traits and Reproduction > Chapter 1 > Lesson 1.2

Lesson 1.2: Introducing Spider Silk Research

Lesson Brief (5 Activities)

- 1 WARM-UP Warm-Up
- 2 STUDENT-TO-STUDENT DISCUSSION Introducing Darwin's Bark Spiders
- 3 SIM Exploring in the Simulation
- 4 HOMEWORK Homework

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

ASSIGN

Overview

Students learn that Darwin's bark spiders, a newly discovered spider species, have the strongest spider silk on Earth. When bred for optimal silk flexibility, their silk may have important medical applications. For example, Darwin's bark spiders' silk may be used to repair human tendons one day. Unfortunately, not all Darwin's bark spiders have the same silk flexibility. In order to help genetic

Digital Resources

- Classroom Slides 1.2 | PowerPoint
- Classroom Slides 1.2 | Google Slides
- All Projections

ing Proteins and

3 MODELING TOOL Modeling Silk Flexibility

4 HOMEWORK Homework

GENERATE PRINTABLE LESSON GUIDE

ASSIGN

Digital Resources

- Classroom Slides 1.4 | PowerPoint

@ ASSIGN

Student Status Screen

Teacher tip: Use Student Status screen to keep track of where students are in the digital platform while you're teaching, and to see their progress on activities in which they can digitally submit work.

The screenshot shows the AmplifyScience interface for Lesson 1.2: Mysterious Moon Jelly Increase. The top navigation bar includes the AmplifyScience logo and the path: Populations and Resources > Chapter 1 > Lesson 1.2. The main header features the lesson title and a background image of blue moon jellies. Below the header is a progress bar with four sections: 1. Lesson Brief (4 Activities), 2. WARM-UP Warm-Up, 3. TEACHER-LED DISCUSSION Video: Studying Jelly Populations, 4. TEACHER-LED DISCUSSION Introduction to the Glacier Sea Ecosystem, 5. SIM Exploring the Populations and Resources Sim, and 6. HOMEWORK Homework. The current section is Lesson Brief. Below the progress bar are buttons for 'RESET LESSON' and 'GENERATE PRINTABLE LESSON GUIDE', and an 'ASSIGN' button. The main content area is divided into three columns: 'Overview' (with sub-sections: Overview, Materials & Preparation, Differentiation, Standards, Vocabulary), 'Digital Resources' (with items: Classroom Slides 1.2 | PowerPoint, Classroom Slides 1.2 | Google Slides, All Projections), and a 'Spanish' button. The bottom right corner has a chat icon.

Reporting

The Reporting feature allows you to analyze student performance on Pre-Unit, Critical Juncture, and End-of-Unit Assessments.

You can generate reports on the full class, individual students, or specific assessment items.

AmplifyScience > Populations and Resources

19 Lessons

Populations and Resources

JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE

Chapter 1: Stability and Change in Populations
4 Lessons

Chapter 2: Energy and Changes to Populations
7 Lessons

Chapter 3: Indirect Effects in Ecosystems
4 Lessons

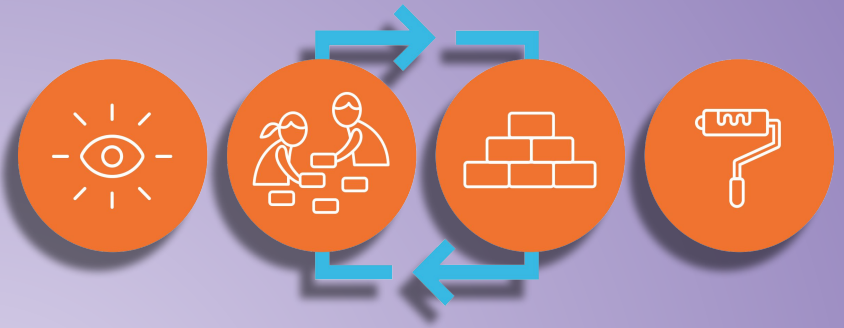
Español

Plan for the day

- Amplify Science NYC
- Guided Unit Planning
- Guided Lesson Planning
- Additional Resources
- **Reflection and closing**



What does this Image represent?



A Amplify Science Approach

B How students build a complex explanation

C How students deepen their understanding

D All of these

What is the first step to the Amplify Science Approach?

A

Collect evidence
from multiple
sources

C

Apply knowledge to
solve different
problem

B

Introduce a
Phenomenon and/or
real world problem

D

Build an increasingly
complex explanation

Where are differentiation notes for your Unit lessons?

A

Unit Level
Materials and
Prep

C

Digital TG
Lesson Level

B

Unit Level
Science
Background

D

Teacher
Overview

In Chat

What is your number one
takeaway from this
workshop ?

A stylized illustration of a bear's face, rendered in a dark purple color. The bear is wearing black-rimmed glasses. The background is a solid, slightly lighter shade of purple. The word "Questions?" is written in a white, bold, sans-serif font across the bottom of the bear's face.

Questions?



Customer Care

Seek information specific to enrollment and rosters, technical support, materials and kits, and teaching support, weekdays 7AM-7PM EST.



scihelp@amplify.com



800-823-1969



Amplify Chat